

IN THE SPECIFICATION

Replace the paragraph beginning at page 7, line 26 with the following rewritten paragraph.

The flow chart of FIG. 3 illustrates the elements of the invented method in connection with the steps of decoding a macroblock. The invention is based on the idea that blocks are an artificial way to divide information, and therefore in low bit-rate video sequences variations of natural images between blocks should occur slowly and/or within certain limits in an expected manner. The method comprises three separate detection elements, of which at least two are combined with the decoding process of variable length decoding 31, inverse quantization 32 and inverse DCT 33. The detection elements utilise available information at the different levels of decoding to detect transmission errors. The first detection element 34 performs steps for inspecting block level DCT components, and it can be performed either before [[of]] or after inverse quantization. For the purposes of the second and third detection elements, the DCT components of the current macroblock are temporarily stored e.g. to a volatile memory of the decoder. The second detection element 35 performs steps for block level spatial comparison, and the third detection element 36 performs comparisons at the macroblock level. For detection, only corresponding components are compared with each other (i.e. Y-U-, Y-, U-, and V-components separately). The interpretation of detection can rely on results from studying only one component, or results from studying more components as well. In the following, the detection elements of FIG. 3 will be studied in more detail.

Replace the paragraph beginning at page 9, line 9 with the following rewritten paragraph.

The flow chart of FIG. 5b illustrates an embodiment of the method in FIG. 5a, in which actually two first reference values and

corresponding first threshold values are generated. In step 511 the DCT matrix is divided into horizontal, vertical, diagonal and high frequency bands. Exemplary horizontal, vertical and diagonal bands, further referred to collectively as low frequency bands, are illustrated in FIGS. 4b, 4c, and 4d respectively. There can be some overlap between these low frequency bands. In step 512 the first low frequency band k is chosen. The absolute sum $abSum_k$ of the coefficients, the greatest absolute coefficient value $AC_{max,k}$ and the number n_k of non-zero factors of $abSum_k$ are calculated in step 513. In step 514 the number of non-zero coefficients in the low frequency band k is checked, and if there is are more than one non-zero coefficients in the band, the coefficient with the greatest absolute value $AC_{max,k}$ is subtracted from the absolute sum of the other non-zero coefficients $abSum_k$, and the sum is added to a predefined constant value C_1 . The attained sum is defined 521 as an auxiliary first threshold TH1a. If there is only one or no non-zero coefficients, the auxiliary first threshold value TH1a is defined 522 to be the predefined constant value C_1 . In step 541 the greatest absolute coefficient value $AC_{max,k}$ (first reference value) is compared to the first threshold value TH1a, and if the first reference value $AC_{max,k}$ is greater or equal than the first threshold value TH1a, an error is detected 560. If the first reference value $AC_{max,k}$ is smaller than the first threshold value TH1a, it is checked 542, whether all low frequency bands have already been examined. If not, the next one is chosen (step 543).